

We claim:

1. A fluid sample collection device for collecting .05mL or less of blood, and for insertion and testing of said blood in an analyzer, comprising:

a thin elongate body having a finger-grip at one end, and another functional insertion end, said insertion end including,

a collecting region including an entrance aperture through which fluid enters the device by capillary action and flows into said collecting region,

a testing region in fluid communication with said collecting region for containing said fluid during testing inside said analyzer, and

a pumping region in fluid communication with said testing region for introducing a pressure-differential and thereby inducting said fluid from said collecting region into said testing region for testing.

2. The fluid sample collection device according to claim 1, wherein said pumping region comprises a bulb for introducing said pressure-differential.

3. The fluid sample collection device according to claim 1, wherein said pumping region comprises an orifice for coupling a pump in said analyzer to said testing region for introducing said pressure-differential.

4. The fluid sample collection device according to claim 2, wherein said bulb is

operated by insertion of said collection device into said analyzer and squeezing thereof during insertion.

5. The fluid sample collection device according to claim 2, wherein said bulb is operated by squeezing via an actuator in said analyzer.

6. The fluid sample collection device according to claim 1, wherein said testing region comprises an open-ended chamber that is sealed by insertion between sensor walls of said analyzer.

7. A fluid sampling device, comprising:  
means for collecting a fluid sample by capillary action; and  
means for transporting said fluid to a testing region by pressure-differential for testing by an analyzer.

8. A disposable blood sample collection device for insertion and testing of a blood sample in a portable analyzer, comprising:

an elongate body including,

a collecting region including an entrance aperture through which blood is drawn into the device by capillary action,

a testing region in fluid communication with said collecting region for exposing said blood sample to a sensor during testing inside said analyzer, and

an orifice in fluid communication with said testing region for coupling a pump inside said analyzer to induct said blood sample from said collecting region into said testing region for testing.

9. The fluid sample collection device according to claim 1, wherein said testing region comprises an open-ended chamber that is sealed by insertion between sensor walls of said analyzer.

10. A disposable blood sample collection device for insertion and testing of a blood sample in a portable analyzer, comprising:

an elongate body including,

a collecting region including an entrance aperture through which blood is drawn into the device by capillary action,

a testing region in fluid communication with said collecting region for exposing said blood sample to a sensor during testing inside said analyzer, and

a bulb in fluid communication with said testing region and manipulated by said analyzer to induct said blood sample from said collecting region into said testing region for testing.

11. The disposable blood sample collection device according to claim 10, wherein said bulb is manipulated by said analyzer as a result of insertion therein.

12. The disposable blood sample collection device according to claim 10, wherein said

bulb is manipulated by an actuator inside said analyzer.

13. The disposable blood sample collection device according to claim 12, wherein said actuator comprises a solenoid.

14. A disposable blood sample collection device for insertion into an analyzer, comprising:

a thin elongate body adapted for insertion into said analyzer;

a capillary tube integrally-molded in said body and extending inwardly from a distal end;

an open-sided testing chamber in fluid communication with said capillary tube; and

an actuator region in fluid communication with said testing chamber for introducing a pressure-differential and thereby inducing blood from said capillary tube into said testing chamber for testing.

15. The disposable blood sample collection device according to claim 14, wherein said capillary tube is pre-loaded with anticoagulant.

16. The disposable blood sample collection device according to claim 14, wherein said thin elongate body comprises at least one edge which communicates with said analyzer to guarantee disposable is located correctly with respect to said analyzer..

17. A blood analyzer system, comprising:

a blood analyzer having an insertion bay with a closure, and an ultrasonic sensor disposed inside said bay;

a sample collection device for insertion into the bay of said analyzer, said sample collection device further comprising,

a body adapted for insertion into said analyzer;

a capillary tube integrally-molded in said body and extending inwardly from a distal end for collecting a blood sample,

an open-sided testing chamber in fluid communication with said capillary tube, and

an actuator region in fluid communication with said testing chamber for introducing a pressure-differential and thereby inducting blood from said capillary tube into said testing chamber for testing.

18. The blood analyzer system of claim 17, wherein said closure latches shut against said sample collection device to secure it in the bay.

19. The blood analyzer system of claim 17, wherein said sample collection device is formed with structural features for indexed seating inside the bay.

20. The blood analyzer system of claim 17, wherein said sample collection device is formed of an elastomer.

21. The blood analyzer system of claim 20, wherein said elastomer sample collection

device is formed with a crescent aperture for resiliency when latched into said bay.